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## Lyon County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 21 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Lyon County economy.<sup>1</sup> These 21 sectors have a total direct output of approximately \$1720 million and support 2,652.5 jobs in Lyon County. Running the model for all 21 sectors simultaneously produces the following results:

**Agriculture Contribution in Lyon County**

Impact Type <sup>2</sup>	Employment	% of Total Employment	Total Value Added <sup>3</sup>	% of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	% of Gross Regional Product
Direct Effect	2,652.5	15%	\$260,651,328	21%	\$1,719,727,546	135%
Indirect Effect	1,072.8	6%	\$88,038,034	7%	\$164,120,443	13%
Induced Effect	635.9	4%	\$39,912,131	3%	\$69,224,886	5%
Total Effect	4,361.1	25%	\$388,601,493	31%	\$1,953,072,875	154%

As shown in the above table, agriculture, food, and food processing supports 4,361.1 jobs, or 25% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$1953 million, roughly 154% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 21 agriculture, food, and food processing sectors is approximately \$389 million, or 31% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 31% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:  
[https://implan.com/index.php?option=com\\_content&view=category&id=19](https://implan.com/index.php?option=com_content&view=category&id=19)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

<sup>4</sup> GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

<sup>5</sup> Output = Intermediate Inputs + Value Added

In the top ten by employment, Animal, except poultry, slaughtering is the top employer in the agriculture industry with 824.1 employees. This table also shows the amount of jobs that are created by the agriculture industry in Lyon County.

#### Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Animal, except poultry, slaughtering.....	824.1	\$498,566,875
Bread and bakery product, except frozen, manufacturing .....	371.1	\$44,621,519
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming .....	332.8	\$60,370,851
Wholesale trade.....	305.9	\$62,453,949
Dog and cat food manufacturing .....	303.6	\$382,374,172
Animal production, except cattle and poultry and eggs.....	247.5	\$17,550,536
Truck transportation.....	225.5	\$28,697,071
All other crop farming.....	177.8	\$15,788,604
Soybean and other oilseed processing .....	117.7	\$610,674,638
Limited-service restaurants .....	86.5	\$4,069,814

The Soybean and other oilseed processing industry directly contributes approximately \$611 million to Lyon County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

#### Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Soybean and other oilseed processing .....	117.7	\$610,674,638
Animal, except poultry, slaughtering.....	824.1	\$498,566,875
Dog and cat food manufacturing .....	303.6	\$382,374,172
Wholesale trade.....	305.9	\$62,453,949
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming .....	332.8	\$60,370,851
Bread and bakery product, except frozen, manufacturing .....	371.1	\$44,621,519
Truck transportation.....	225.5	\$28,697,071
Oilseed farming.....	15.4	\$23,392,358
Meat processed from carcasses .....	48.5	\$22,281,489
Rail transportation.....	40.7	\$19,178,818

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Lyon County's economy.

[illegible]

All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.